
FORT CAMPBELL ENVIRONMENTAL HANDBOOK
Guidance and Instructions
DISPOSAL OF MRE HEATERS

1. Purpose and Scope:

The purpose of this bulletin is to define the appropriate method for managing unused Flameless Ration Heater (FRH) that are provided in the MRE (Meals Ready to Eat) and to prevent their future mismanagement.

2. Reference:

- a. 40 CFR 261.4(b)(1), Household Hazardous Waste Exclusion.
- b. Tennessee Rule 1200-1-11-.02(1)(d)(2)(i), Household Hazardous waste Exclusion.
- c. EPA Guidance Letter dated 29 Oct 2004

3. Definitions: None

4. General:

- a. Cases of MREs and, in many incidents, the individual packet, contain a light green pouch known as a Flameless Ration Heater (FRH) (*NSN 8970-01-321-9153*). The devices are very helpful for the troops in the field to heat their food, but can cause safety problems.
- b. The heaters consist of a plastic bag containing a piece of fiber board and powdered magnesium or magnesium alloys and a few other materials. Powdered magnesium is a water reactive solid and generates heat when activated by water.
- c. The instructions specify that the individual using the heater open the top of the bag, pour water into the bag to a specified level, slide the food into the pouch and fold the top down. When heaters are filled with water, the heating process is initiated. The magnesium and water react and the food is immediately heated.
- d. Warnings on the pouch indicate that hydrogen, a flammable gas, will be generated during the heating process and it warns the user not to place near an open flame. It also warns the user not to use more than ten in a vehicle or shelter. Adequate ventilation is required due to the hydrogen gas replacing oxygen. Temperatures will normally reach 120 degrees F and may, with an insufficient amount of moisture, reach 180 degrees F. This can cause burns on your skin if in contact. Caution is also given about carrying a heater in your clothing because of burns.
- e. Many soldiers either choose not to use their heaters or do not have water available to activate them. EPA has determined that intact MREs packaged with FRHs are not reactive hazardous waste and may be disposed of as non-hazardous solid waste. This finding applies to all FRHs packaged with MREs issued or in stock. Under EPA's new guidance letter as identified in reference section above, FRH's issued to soldiers with MREs for use in the field, at military installations, or in a temporary or permanent residential setting are exempt from RCRA regulations under the household hazardous waste exclusion. In these circumstances, soldiers may dispose of waste FRHs, either activated or inactivated, as non-hazardous solid waste. The States of Tennessee and Kentucky also support this exclusion.

FORT CAMPBELL ENVIRONMENTAL HANDBOOK
Guidance and Instructions
DISPOSAL OF MRE HEATERS

5. Responsibilities:

- a. The EQO is responsible for:
 - 1) Ensuring that all information is appropriately disseminated to all parties in his/her unit.
 - 2) Ensuring that all unused individual FRHs that are generated in his/her unit are properly disposed of with normal solid waste except for FRH bulk case lots.
- b. Each individual who uses an FRH is responsible for properly disposing of his/her FRH after use.

6. Instructions for the disposal of unused Flameless Ration Heaters:

- a. While in the training area, unused individual heaters will be placed with normal solid waste and collected in approved solid waste containers such as garbage cans.
- b. When returning to the Garrison, solid waste containers used for collecting trash and unused heaters will be emptied into appropriate containers such as dumpsters and other approved solid waste storage containers to be picked up by the solid waste contractor.
- c. All FRHs may be disposed of as regular trash or units may collect issued FRHs from soldiers for disposal as non-hazardous solid waste. This only applies to FRHs that have been issued to soldiers for use, not to FRHs while in stock such as from bulk case lots. Bulk case lots of FRHs must be taken to the Fort Campbell Recycling Center for turn-in and recycle to avoid being classified as a reactive hazardous waste.

7. Additional Guidance:

- a. For additional guidance and information, and answers to your questions, contact DPW Environmental Division, Pollution Prevention Branch at 798-9786.
- b. For future reference, place this document behind *Tab number 11* in your Fort Campbell Environmental Handbook.